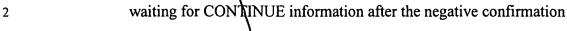We claim:

1. A method for receiving information in a communication system that uses ARQ with

2 HR, the method comprises the step of:

3   deciding which confirmation message to transmit based on an information

4 status flag indication contained in the received information and a decoding operation

5 performed on the received information thus providing a technique for recovering from

6 misinterpretation of a previous confirmation message transmission.

1 2. The method of claim 1 wherein the step of deciding which confirmation message to

2 transmit comprises waiting for NEW information.

1 3. The method of claim 1 further comprising waiting for NEW information after a

2   positive confirmation message was transmitted.

1 4. The method of claim 1 further comprising transmitting a positive confirmation

2 message after receiving NEW information while waiting for either NEW or CONTINUE

3 information, decoding said received information successfully and discarding any

4 previously received information.

1 5. The method of claim 1 where the step of deciding which confirmation message to

2 transmit further comprises transmitting a positive confirmation message if the received

3 information is NEW information and the decoding operation was successful.

1 6. The method of claim 1 where the step of deciding which confirmation message to

2 transmit further comprises transmitting a negative confirmation message if the received

3 information is NEW information and the decoding operation was unsuccessful

1 7. The method of claim 6 further comprising the steps of:

2   waiting for CONTINUE information after the negative confirmation

3   message was transmitted;

4   combining received CONTINUE information with previously received

5   and decoded information; and

6   performing a decoding operation on the combined information

1   8. A method for ARQ using Incremental Redundancy, the method comprises:

2   transmitting a positive confirmation message after having received

3   CONTINUE information while waiting for NEW information, or after having

4   successfully decoded received NEW information while waiting for either NEW or

5   CONTINUE information, or after having successfully decoded combined CONTINUE

6   information after having waited for CONTINUE information.

1   9. The method of claim 8 further comprising the step of transmitting a negative

2   confirmation message after any of the received information was unsuccessfully decoded.

1   10. The method of claim 8 where the received information is formatted as one or more

2   sub-packets where each sub-packet contains a one-bit information status flag defining the

3   packet as either NEW or CONTINUE.

1   11. The method of claim 10 where the information status flag is stored in each packet's

2   header.

1   12. The method of claim 8 where the received NEW or CONTINUE information

2   comprises a plurality of packets where each packet has a header, a payload and a trailer

3   and where a one-bit NEW/CONTINUE flag is stored in the header.